

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1 – 18 (cancelled)

Claim 19 (currently amended): A method for forming a ~~MSiON or MSiO~~ MSiN dielectric film comprising the steps of:

- a) vaporizing a metal source (M) to form a vaporized metal source;
- b) providing a vapor phase silicon source, wherein said silicon source has a vapor pressure of at least 50 torr at about 20°C;
- b)c) feeding a plurality of precursors to a deposition device, wherein said precursors comprise said vaporized metal source, [[a]] said silicon source, an oxygen source, and a nitrogen source if MSiON is desired; and
- e)d) forming a dielectric film, wherein said dielectric film is formed with in a single step such that the desired final composition film is formed absent a post deposition step.

Claim 20 (currently amended): A method for forming a ~~MSiN~~ MSiO metallic film comprising the steps of:

- a) vaporizing a metal source to form a vaporized metal source;
- b) providing a vapor phase silicon source, wherein said silicon source has a vapor pressure of at least 50 torr at about 20°C;
- b)c) feeding a plurality of precursors to a deposition device, wherein said precursors comprise said vaporized metal source, [[a]] said silicon source, and a nitrogen an oxygen source; and

- e)d) forming a metallic film, wherein said metallic film is ~~with~~ formed in a single step such that the desired final composition film is formed absent a post deposition step.

Claim 21 (previously presented): The method of claim 19, wherein said silicon source comprises a molecular structure absent carbon and/or a molecular structure absent chlorine.

Claim 22 (cancelled)

Claim 23 (cancelled)

Claim 24 (previously presented): The method of claim 19, wherein said silicon source is selected from the group comprising:

- a) disiloxane;
- b) trisilylamine;
- c) disilylamine;
- d) silylamine;
- e) tridisilylamine;
- f) aminodisilylamine;
- g) tetrasilyldiamine;
- h) disilane;
- i) derivatives of disilane and/or trisilane; and
- j) mixtures thereof.

Claim 25 (currently amended): The method of claim ~~19~~ 20, wherein said oxygen source comprises a molecular structure absent carbon and/or a molecular structure absent chlorine.

Claim 26 (currently amended): The method of claim 49 20, wherein said oxygen source is selected from the group comprising:

- a) oxygen;
- b) nitrous oxide;
- c) ozone;
- d) disiloxane; and
- e) mixtures thereof.

Claim 27 (previously presented): The method of claim 19, wherein said nitrogen source comprises a molecular structure absent carbon and/or a molecular structure absent chlorine.

Claim 28 (currently amended): The method of claim 19, wherein said nitrogen source is the same as said metal source~~[[,]]~~ or said silicon source ~~and/or said oxygen source~~.

Claim 29 (previously presented): The method of claim 19, wherein said nitrogen source is ammonia.

Claim 30 (currently amended): The method of claim 40-19, wherein said metal source is selected from the group consisting of a dialkylamino, and alkoxy ligands.

Claim 31 (previously presented): The method of claim 19, wherein said metal source is an inorganic compound selected from the group consisting of:

- a) hafnium (Hf);
- b) zirconium (Zr);
- c) titanium (Ti);
- d) niobium (Nb);
- e) tantalum (Ta);

- f) scandium (Sc);
- g) yttrium (Y);
- h) lanthanum (La);
- i) gadolinium (Gd);
- j) europium (Eu);
- k) praseodymium (Pr) or any another lanthanide (Ln); and
- l) mixtures thereof.

Claim 32 (previously presented): The method of claim 19, wherein the amounts of said metal source and said silicon source in said desired final composition of said dielectric film are controlled independently.

Claim 33 (previously presented): The method of claim 19, wherein said dielectric film is completed by using a chemical vapor deposition process.

Claim 34 (previously presented): The method of claim 19, wherein said dielectric film step is completed by using an atomic layer deposition process.

Claim 35 (currently amended): A ~~MSiON or a MSiO~~ MSiN dielectric film obtained in accordance with the process of claim 19.

Claim 36 (currently amended): A ~~MSiN~~ MSiO metallic film obtained in accordance with the process of claim ~~19~~ 20.

Claim 37 (new): The method of claim 20, wherein said silicon source comprises a molecular structure absent carbon and/or a molecular structure absent chlorine.

Claim 38 (new): The method of claim 20, wherein said silicon source is selected from the group comprising:

- a) disiloxane;
- b) trisilylamine;
- c) disilylamine;
- d) tridisilylamine;
- e) aminodisilylamine;
- f) tetrasilyldiamine;
- g) derivatives of disilane and/or trisilane; and
- h) mixtures thereof.

Claim 39 (new): The method of claim 20, wherein said oxygen source is the same as said metal source or said silicon source.

Claim 40 (new): The method of claim 20, wherein said metal source is an inorganic compound selected from the group consisting of:

- a) hafnium (Hf);
- b) zirconium (Zr);
- c) titanium (Ti);
- d) niobium (Nb);
- e) tantalum (Ta);
- f) scandium (Sc);
- g) yttrium (Y);
- h) lanthanum (La);
- i) gadolinium (Gd);
- j) europium (Eu);
- k) praseodymium (Pr) or any another lanthanide (Ln); and
- l) mixtures thereof.

Appl. No. 10/591,629
Attorney Docket No. Serie 6550 CIP
Amdt. dated January 24, 2008
Response to Office Action of September 24, 2007

Claim 41 (new): The method of claim 20, wherein the amounts of said metal source and said silicon source in said desired final composition of said dielectric film are controlled independently.